

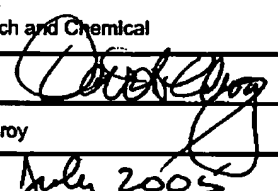
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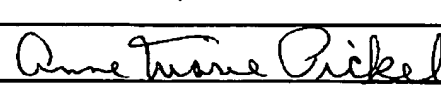
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| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 10/072,402 | RECEIVED CENTRAL FAX CENTER JUL 08 2005 |
| | Filing Date | 02/08/2002 | |
| | First Named Inventor | Rodrigues, Klein A. et al. | |
| | Art Unit | 1711 | |
| | Examiner Name | Asimovsky, Olga | |
| Total Number of Pages in This Submission | 4 | Attorney Docket Number | 2002.ALC |

| ENCLOSURES (Check all that apply) | | |
|--|---|--|
| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD Remarks SUPPLEMENT TO APPEAL BRIEF | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | | |
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| Firm Name | National Starch and Chemical | | |
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| Printed name | David P. LeCroy | | |
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Supplement to Appeal Brief Under 37 C.F.R. § 41.37

PATENT APPLICATION
Attorney Docket No. 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: RODRIQUES, Klein A. *et al.*
SERIAL NO.: 10/072 402 **GROUP ART UNIT:** 1711
FILED: 8 February 2002 **EXAMINER:** ASINOVSKY, Olga
ENTITLED: HYDROPHOBE-AMINE GRAFT COPOLYMER

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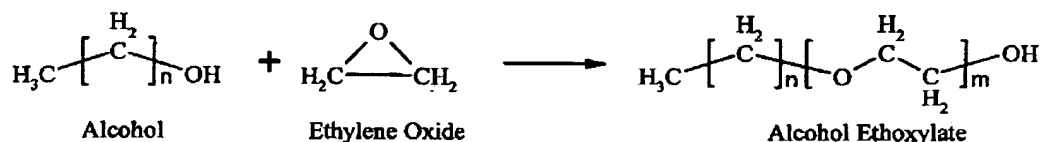
SUPPLEMENT TO APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Dear Sir:

As a supplement to Appellants' Appeal Brief, which was transmitted to the United States Patent and Trademark Office on 5 July 2005, Appellants provide the following arguments in further to Appellants' Arguments concerning the rejection of claims 7-12, 21, 23 and 24 under 35

U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,960,465 to Arfaei *et al.* ("Arfaei"), in particular, Section VII(A)(3) and those remarks directed therein to the difference between polyethylene glycol and alcohol ethoxylate.

As indicated in Appellants' Brief, alcohol ethoxylate is so named because it is formed by the ethoxylation of a fatty acid as shown below –



As seen above, the repeating unit is the $\text{CH}_3-(\text{CH}_2)_n$ portion of the polymer. In alcohol ethoxylates n typically varies from 5 to 22. This level of hydrophobicity gives alcohol ethoxylate its surfactant character. As n increases, its hydrophobicity increases making alcohol ethoxylate less water soluble. This is reflected in the hydrophilic-lipophilic balance, or HLB. The HLB scale goes from 0 for completely water insoluble materials to 20 for completely water soluble materials. C12 to C13 alcohol ethoxylate with 5 moles of ethylene oxide (Neodal 23-5 from Shell used in Example 10 of the present patent application) has an HLB of 10.7. C9 to C11 alcohol ethoxylate with 2.5 moles of ethylene oxide (Neodal 91-2.5 from Shell used in Example 9 of the present patent application) has an HLB of 8.5. Both alcohol ethoxylates would be considered water insoluble. In contrast, polyethylene glycol has an HLB of 20, exhibiting no hydrophobic characteristic. Unlike the alcohol ethoxylates included in the Examples of the present patent application, polyethylene glycol is completely water soluble and has no surfactant-like qualities. Accordingly, the Examiner's statement that the polyoxyethylene having hydroxyl end groups is the same as the alcohol ethoxylate of claim 24 is incorrect.

For these reasons, as well as those reasons previously provided in Appellants' 5 July 2005 Appeal Brief, the Examiner has failed to establish a *prima facie* case of anticipation under 35 U.S.C. § 102(b) of any of claims 7-12, 21, 23 and 24. Accordingly, the rejection of claims 7-12, 21, 23 and 24 as being anticipated by Arfaci should be reversed.

Respectfully submitted,

Dated: 8 July 2005

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